

DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

A12CE
Revision 23
BEECH
60
A60
B60

April 15, 1996

TYPE CERTIFICATE DATA SHEET NO. A12CE

This data sheet which is part of type certificate No. A12CE prescribes conditions and limitations under which the product for which the type certificate was issued meets the airworthiness requirements of the Federal Aviation Regulations.

Type Certificate Holder Raytheon Aircraft Company
9709 E. Central
Wichita, KS 67206

I - Model 60, Duke, (Normal Category), Approved February 1, 1968
Model A60, Duke, (Normal Category), Approved January 30, 1970
Model B60, Duke, (Normal Category), Approved October 5, 1973

Engines Lycoming TIO-541-E1A4 or TIO-541-E1C4 (2 of either or 1 of each for S/N P-4 through P-522)

2 Lycoming TIO-541-E1C4 (for S/N P-523 and up)

Fuel 100LL or 100 minimum grade aviation gasoline
115/145 alternate grade aviation gasoline

Oil Ashless dispersant multi-grade conforming to MIL-L-22851 or a Lycoming approved synthetic oil

Engine limits Takeoff and maximum continuous power, 2900 r.p.m. at 41.5 in. hg., 380 b. hp.

Maximum normal operating power, 2750 r.p.m. at 36.5 in. hg., 301 hp.
(for S/N P-523 and up)

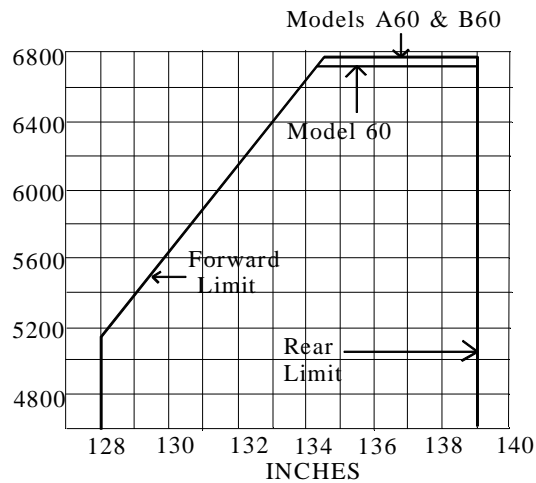
Propeller and
propeller limits (a) 2 (in any combination) Hartzell three-blade propellers
Diameter: 74 in., (Normal) Minimum allowable for repair 73-1/2 in.
(No further reduction permitted)
Pitch settings at 30 in. sta.:
low 13°-14°, high 81.7°

HC-F3YR-2/C7479-2R
or HC-F3YR-2/C7479B-2R
or HC-F3YR-2F/FC7479-2R
or HC-F3YR-2F/FC7479B-2R
or HC-F3YR-2UF/FC7479-2R
or HC-F3YR-2UF/FC7479B-2R
or HC-F3YR-2UF/FC7479K-2R (for S/N P-579 and up)
See NOTE 6

(b) Beech 60-389000 governor

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Airspeed limits (IAS)	Never exceed	268 m.p.h. (233 knots)
	Maximum structural cruising	238 m.p.h. (207 knots)
	Maneuvering	184 m.p.h. (160 knots)
	Maximum flap extension speed	
	Approach position 15°	200 m.p.h. (174 knots)
	Full down position 30°	154 m.p.h. (134 knots) (60 and A60) 161 m.p.h. (140 knots) (B60)
	Landing gear extended	200 m.p.h. (174 knots)
	Landing gear operating	200 m.p.h. (174 knots)
C.G. range (Landing Gear Extended)	(+134.2) to (+139.2) at 6725 lb. Model 60 (See NOTES 4 and 5)	
	(+134.6) to (+139.2) at 6775 lb. Models A60 and B60 (See NOTE 5)	
	(+128.0) to (+139.2) at 5100 lb. or less (All Models)	
	Straight line variation between points given	
	Moment change due to retracting landing gear (+857 in.-lb.)	



Empty weight C.G. range	None	
Maximum weight	Takeoff and landing	6725 lb. (Model 60) (See NOTES 4 & 5)
		6775 lb. (Models A60/B60) (See NOTE 5)
	Ramp weight	6819 lb.
Minimum Crew	One pilot	
No. of seats and Cargo loading	Maximum 6 including crew at +141. See loading instructions in Pilot's Operating Manual for approved seating and cargo configurations.	
Maximum baggage	500 lb. at +75 (nose compartment)	
	315 lb. at +230 (aft cabin area)	

Fuel capacity	Tank	Cap. Gal.	Usable Gal.	Code # (Full Fuel Only)	Arm
(P-4 through P-195)	L & R Wing	73.5 ea.	71 ea.	(1)	137.9
	or L & R Wing				
	& Nacelle	103.5 ea.	102 ea.	(1)	139.0
	or L & R Wing				
	& Nacelle	103.5 ea.	96 ea.	(2)	139.5
(P-196 through P-219)	or L & R Wing				
	& Nacelle	103.5 ea.	101 ea.	(3)	139.0
(P-220 through P-364 except P-348)	L & R Wing & Nacelle	103.5 ea.	101 ea.	(5)	139.0
(P-348, P-365 and after)	L & R Wing & Nacelle	103.5 ea.	101 ea.	(5)	139.0
	or L & R Tip, Wing &				
	Nacelle	118.5 ea.	116 ea.	(5)	139.7
Code # Explanation:					
#1 As manufactured with unbaffled tanks.					
#2 Unbaffled tanks after compliance with S.I. 0559-281.					
#3 Baffled tanks after compliance with S.I. 0559-281.					
#4 As manufactured with baffled tanks.					
#5 As manufactured with baffled tanks and increased unusable fuel requirement.					
See NOTE 1 for data on unusable fuel					
Oil capacity (Wet Sump)	26 qt. (+88)				
Max. Operating Limit	30,000 ft. pressure altitude				
Control surface movements	Wing flaps			Maximum	30°
	Aileron	Up	25°	Down	15°
	Aileron tab (LH only)	Up	10°	Down	10°
	Aileron tab anti-servo	Up	12°	Down	7°
	Elevator	Up	17°	Down	15°
	Elevator tab (LH only)	Up	10°	Down	30°
	Elevator tab servo	Up	6°	Down	7°
	Rudder	Right	33°	Left	28°
	Rudder tab	Right	20°	Left	20°
Serial Nos. eligible	Model 60:	P-4 through P-126 (except P-123)			
	Model A60:	P-123, P-127 through P-246			
	Model B60:	P-247 and up			

Data Pertinent to All Models

Datum	Located 100 in. forward of front pressure bulkhead
Leveling means	Drop plumb line between leveling screws in cabin door frame rear edge.
Certification basis	<p>Part 23 of the Federal Aviation Regulations effective February 1, 1965, as amended by 23-1, 23-2, 23-3; and Paragraph 23.959 of Amendment 23-7 for S/N P-220 and up (also S/N P-4 through P-219 after compliance with S.I. 0559-281); and Amendment 23-11 for S/N P-402 and up (also S/N P-4 through P-401 when modified per Beech Aircraft Corporation Kit Drawing 60-3006); and Paragraphs 23.1385(c), 23.1387(a), 23.1387(e) of Amendment 23-12; Part 36, as amended by 36-1 through 36-10 for S/N P-523 and up; and Special Conditions dated May 16, 1967, forwarded with FAA letter dated June 1, 1967; approved for flight into known icing conditions when equipped as specified in the Approved Airplane Flight Manual.</p> <p>Equivalent safety findings: FAR 23.75; 23.175(b); 23.621 (S/N P-4 through P-592); 23.1305(g); 23.1545(a) and 23.1583(a) (S/N P-486 and up) (also S/N P-247 through P-485 when modified per Beech Aircraft Corporation Kit Drawing 60-5023); 23.1549 and 23.1563(a).</p> <p>Application for Type Certificate dated December 22, 1956; Type Certificate No. A12CE issued February 1, 1968, obtained by the manufacturer under delegation option procedures.</p>
Production basis	Production Certificate No. 8 issued and Delegation Option Manufacturer No. CE-2 authorized to issue airworthiness certificates under delegation option provisions of Part 21 of the Federal Aviation Regulations.
Equipment	<p>The basic required equipment as prescribed in the applicable airworthiness regulations (see Certification Basis) must be installed in the aircraft for certification.</p> <p>In addition:</p> <ol style="list-style-type: none"> For flights into known icing conditions, these flight manual supplements and the equipment noted therein: 60-590001-17 Flight into known icing conditions; revision dated February 3, 1978, or later revision 60-590001-11 Continuous pressure operated surface deice system 60-590001-13 Goodrich electrothermal propeller deice system Equipment (Cont.) For all other operations: Pre-stall warning indicator P/N 151-6, 151-7, 190-2 or 190-3 with mounting plate 151-202-1 or 151-202-2 (Safe Flight Corp.) or 191-52 assembly. Model A60 Airplanes (S/N P-144 through P-246) require Airplane Flight Manual P/N 60-590000-5E, revision E-6 dated November 6, 1974, or later revision. Model B60 Airplanes (S/N P-247 and up) require Airplane Flight Manual P/N 60-590000-11, revision A-5 dated November 1, 1974, or later revision.

NOTE 1. Current weight and balance data including list of equipment included in certificated empty weight and loading instructions when necessary must be provided for each aircraft at the original certification.

- (a) The certificated empty weight and corresponding center of gravity locations must include unusable fuel as follows:

(Refer to fuel capacity information for explanation of Code # applicability):

Code #1 and #4 Systems	24 lb.	(+135)
Code #2 System	90 lb.	(+131.7)
Code #3 or #5 Systems	30 lb.	(+134)

- (b) The basic empty weight and corresponding center of gravity must include oil of 49 lbs. at +88.

NOTE 2. The following placard must be displayed in front of and in clear view of the pilot:
"This airplane must be operated in the normal category in compliance with the operation limitations stated in the form of placards, markings and manuals."

NOTE 3. Fuselage pressure vessel structural life limit - refer to the latest revision of the Airplane Flight Manual for mandatory retirement time.

NOTE 4. Model 60 (S/N P-4 through P-126 except P-123) when modified to Beech Dwg. 60-5008 or equipped with Airplane Flight Manual 60-590000-5E dated November 6, 1974, or later revision eligible for a maximum eight of 6775 lb.

NOTE 5. For aircraft equipped with 60-810012-15 (LH) or 60-810012-16 (RH) shock absorbers and 10 PR tires, the landing weight is 6775 lbs. For 8PR tires and 60-810012-13 (LH) and -14 (RH) or lower dash number shock absorbers, a landing weight of 6600 lbs. must be observed. For 10 PR tires and 60-810012-13 (LH) and -14 (RH) or lower dash number shock absorbers, a landing weight of 6450 lbs. must be observed. For 8PR tires and 60-810012-15 (LH) or -16 (RH) or higher dash number shock absorbers, a landing weight of 6600 lbs. must be observed.

NOTE 6. Propeller hub assemblies with the "U" designation shall be installed in pairs only.

Contact Beech Aircraft Corporation as necessary to obtain availability information concerning the drawings and kits which are referenced by this publication.

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